



INSPECTION REPORT: KENSINGTON GOLD MINE

Tongass National Forest Minerals Group
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Date of Inspection: Monday September 23, 2019
Date of Report: Monday October, 7 2019
USDA Forest Service Inspector: Richard Dudek

Ranger District: Juneau Ranger District

Weather Conditions: Partly cloudy with a light rain. Temperature: low 50's °F.

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|---|----------------|
| Exploration in accordance with operating plan | Not Applicable |
| Timber removal following timber sale contract | Not Applicable |
| BMPs for erosion control | Satisfactory |
| Water Quality BMPs | Satisfactory |
| Public safety & fire prevention | Satisfactory |
| Reclamation work adequate and timely | Satisfactory |
| Roads maintenance adequate and current | Satisfactory |
| Tails placement in accordance with plan | Satisfactory |
| Waste Rock placement in compliance | Satisfactory |
| Company supervision of operation | Satisfactory |
| Operating in a clean and orderly manner | Satisfactory |

Any conditions noted as UNSATISFACTORY will require follow up action by the Mine Inspector and a written memorandum to the operator, outlining the necessary work.

NEW REMARKS

Ward Air provided (Cessna 206) transportation to and from site.

Kevin Eppers (Sr. Environmental Manager, Coeur Alaska) accompanied Richard Dudek (Geologist, USFS), Shannon Kelly (Mining Engineer, ADNR).

This inspection included the Access roads, Comet Development Pile, Comet Water Treatment Plant (CTWP), Sherman Creek Outfall 001, Pit 4, mud dump, the TTF area, and the fuel depot.

ACTION ITEMS:

- **Mitigations and modifications are required at the TTF dam spillway to prevent acid rock drainage (ARD) from entering the spillway and outfall 002 (Photo 1).**
- **Stormwater BMPs (silt fencing) on Comet Road bridges need maintenance or replacement**

NOTEWORTHY ITEMS

- **The remaining lower camp housing structures have been removed and shipped off site.**

ACCESS ROADS

During the inspection, the access roads were in good condition (2016 BMP Plan; Table 4-4).

COMET DEVELOPMENT PILE

Coeur Alaska continues to deposit waste rock from the Raven drift at this location (Photo 2).





COMET WATER TREATMENT PLANT (CWTP)

On 9/23/2019, the CWTP was treating 1,095 per minute (gpm). Pond-1 (Photo 3) was receiving mine site water. Pond-2 (Photo 4) was receiving backwash from the water treatment plant.

White material was observed on the test rock used for monitoring white material (Photo 5).

The water return pipeline (Photo 6) for the de-watering bags has been fixed.

SHERMAN CREEK OUTFALL

White material was observed in the creek bed (Photos 7).

The No Name Creek Bridge requires new silt fencing at the north abutment (Photos 8-9). The Sherman Creek Bridge needs new silt fencing installed along the south abutment (Photos 10-11).

TAILINGS TREATMENT FACILITY (TTF) AREA

The TTF's recorded water level on 9/23/2019 was 704.35 feet (Photo 12), and algae was observed in the TTF. After discussing the algal bloom with TTF water treatment plant supervisor. He stated that so far no issues have occurred with algae clogging the water treatment filters.

On 9/23/2019, it was observed that ARD had pooled up on the gravel patch along the side wall, and then flowed onto the floor of the spillway. Coeur Alaska will be providing ADEC with a brief summary for the corrective actions taken to prevent future ARD releases at this location.

In the previous inspection report, IR 175, dated 8/21/2019. It was incorrectly stated that the second diversion pipeline project was completed. As of 9/23/2019, the installation of the second diversion pipeline for the Upper Slate Lake is almost complete (Photo 13). The final project tasks will include connecting the pipeline into the bypass (Photo), and conduct a pressure test to ensure no leaks are present.

On 9/23/2019, the TTF water treatment plant had net discharge of 735-gpm. Approximately 300-gpm was influent water, and approximately 435-gpm was water from the Upper Slate Lake diversion.

The reverse osmosis (RO) and the micro-filtration systems have been removed from site and shipped back to the vendor (Photos 14-15). These systems are no longer needed at this time due to the following: the TTF dam raise, the water level in the TTF is down, and the APDES permit modification to raise the water level in the northern TTF area. The infrastructure for these water treatment systems will remain in place in the event Coeur Alaska requires the need for micro and Nano filtration systems.

There were no ARD plumes observed in the northern TTF area (Photo 16).

PIT 4

Coeur personnel continue to dispose of the graphitic phyllite (GP) as cemented underground backfill (Photo 17). Some ARD generation was observed on the liner for the GP stockpile. Coeur personnel were able to contain ARD and remove it immediately (Photos 18-19).

MUD DUMP



Storm water has accumulated underneath the HDPE liner for the GP stockpile. Environmental Operations is aware that water needs to be pumped out (Photo 20).

The settling ponds at this location are working as intended. Clear water observed discharging from the outlet pond and into the forest (Photos 21-22). This is the location where water is (Photo 23) pumped to the pug plant at Pit 4.

FUEL DEPOT

No fuel sheen and/or spills were observed in the fuel tanks gravel pad and at the refueling pad (Photos 23-24). Due to recent storm events, some water had pooled up in the southeast corner of the fuel tanks gravel pad (Photo 25). The fuel supply contractor also manages the water removal from the fuel tanks gravel pad.

FOLLOW UP ITEMS

- Inspect the access roads.
- Inspect the Comet water treatment plant and settling ponds.
- Inspect for white material in Sherman Creek.
- The removal of the empty super sack at SH-113.
- Water in Mud Dump GP stockpile.
- Inspect the TTF area.
- ARD mitigation for the TTF dam spillway.

PHOTOS (Additional photos available upon request)



Photo 1. ARD seeps in the dam spillway.



Photo 1. The Comet development pile.



Photo 2. Pond 1.



Photo 3. Pond 2.



Photo 4. The test rock for white material accumulation.



Photo 5. The dewatering bags sump water return pipeline for Pond 2.



Photo 6. Sherman Creek outfall 001.



Photo 7. Formerly known as the South fork Bridge.



Photo 8. Silt fencing along the north abutment needs to be replaced.



Photo 9. Formerly known as Upper Sherman Creek Bridge.



Photo 10. Silt long the south abutment of Sherman Creek Bridge needs to be replaced.



Photo 11. The TTF.



Photo 12. The bypass for upper Slate Lake.



Photo 13. The location where the RO was located.



Photo 14. The site where the micro-filtration system was staged.



Photo 15. The northern TTF area ARD collection sumps.



Photo 16. GP and cement mix for underground backfill.



Photo 17. The pump used for removing ARD.



Photo 18. The water truck used for collecting ARD.



Photo 19. ARD collection drain for the mud dump GP stockpile.



Photo 20. The mud dump settling pond.



Photo 21. The outlet for the mud dump settling pond.



Photo 22. The float marker is the water withdrawal pump for the pug plant.



Photo 23. The refueling pad.



Photo 24. No fuel sheening observed.



Photo 25. The fuel depot.

Thanks to Kensington Mine for a safe visit.
U.S. Forest Service Officer: /s/ Richard Dudek
